UNITED ST. .S DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/772,259	12/23/96	MASAKI K	1185.1018/JD

MM42/0809

STAAS & HALSEY
700 ELEVENTH STREET NW
SUITE 500
WASHINGTON DC 20001

EXAMINER	
NGUYEN, T	
ART UNIT	**PAPER NUMBER**
2872	17

DATE MAILED: 08/09/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95)

1- File Copy

Office Action Summary	Application No. 08/772,259	Applicant(s) Masaki et al
	Examiner Thong Q. Nguyen	Group Art Unit 2872

☒ Responsive to communication(s) filed on *Jun 3, 1999*.

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *THREE* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-7* is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-7* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on *Dec 23, 1996* is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature concerning a display as recited in the newly-added material to claim 1 (lines 2-3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as described at pages 1-5 and illustrated in figures 11-12 in view of Gloor et al or Ishikawa et al (all of record).

The optical device as provided by the prior art which is described in the present specification at pages 1-5 and illustrated in figs. 11-12 comprises 1) a light source apparatus having a lamp (7) and a reflector (8); 2) a light guide plate (2) having a light entrance surface, an inclined bottom surface decreasing away from the light entrance surface, an exit surface opposite and spaced from the inclined bottom surface; 3) a reflecting plate (4) disposed adjacent to the inclined bottom surface of the light guide plate; 4) a light control plate (5) having an emitting surface and an entrance surface which defines a prismatic surface which entrance surface faces the exit surface of the light guide plate. It is also noted that the emitting surface of the light control

plate is spaced from the entrance surface of the light control plate as can be seen in figures 11-12 ; and 5) a diffusing plate (6) disposed on the top of the light control plate. With regard to the feature that the light control plate is used to direct light from a light source to a display as recited in the newly-added material to claim 1, such a feature is considered as an inherent characteristic of the light control system of the prior art as can be seen in the present specification at page 5, lines 20-32. If it is not inherent then the use of a light control system for directing light from a light source to a display is clearly known to one skilled in the art as can be seen in the prism sheet for surface light source device provided by Ishikawa et al, see column 4 and figure 11.

But any more?

As a result of such a structure, the optical device of the prior art meets almost the structure of the device as claimed in the present application. However, the optical device of the prior art does not disclose that at least part of the slopes of the prismatic surface of the light control plate defines a diffusing surface for the purpose of generating diffused light passing through the light control plate towards the emitting surface of the light control plate as claimed.

The use of a light control plate having a surface which defines a diffusing surface is disclosed in the art as can be seen in the light control device disclosed by either Gloor et al or Ishikawa et al. In particular, Gloor et al disclose an optical device having a light control plate having a plurality of projections in triangular shape wherein one slope of each projections is used as a diffusing surface. See columns 2-3 and fig. 2, element 26 which diffusing strips 10A-10K. It is also noted that the light diffusing surface is arranged to face the light source (9). In the same viewpoint, Ishikawa et al disclose a light control plate and teach the use of a light diffusing profile

Drop Gloor et al

on a prismatic surface. See column 3 and figure 7. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the optical device having a diffusing function as provided by the prior art by making the light diffusing profile on the prismatic surface of the light control plate as suggested by either Gloor et al or Ishikawa et al for the purpose of controlling a diffusing light beam and simultaneously reducing the light effects of the reflecting sheet while also obtaining the advantage of reduction of the components used in the optical device.

Response to Arguments

Applicant's arguments filed on June 03, 1999 have been fully considered but they are not persuasive for the following reasons.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant has provided his opinion for each of references used in the rejection, i.e., the prior art described at pages 1-5 and shown in figures 11-12 of the present specification, the patent issued to Gloor et al and the patent issued to Ishikawa et al, and then concluded that neither Gloor et al nor Ishikawa et al teaches the reduction of light effects of a reflecting element used in the inventive device. The Examiner respectfully disagreed with applicant's viewpoint. Applicant should note that each of the Gloor et al and Ishikawa et al is used as a secondary reference in combination with the light source device

of the prior art described at pages 1-5 and shown in figs 11-12 which prior art is used as the primary reference. The structure of the light system of the primary reference meets all of the limitations of the device as claimed except the formation of diffusing elements/layers on the repeated projections (or the prismatic surface) formed on the entrance side of the light control element. Each of the Gloor et al reference and Ishikawa et al reference is used in the combination to show one skilled in the art the formation of diffusing elements/layers on one side or only one slope of each projections (or prismatic surface) of a light control element for the purpose of controlling the diffusing process. As such a combination the light control element with an entrance prismatic surface wherein diffusing elements are formed on the prisms/projections of the combined product provided by the prior art and Gloor et al (or Ishikawa et al) will inherently reduce the light effect of the light reflecting element.

Applicant has also argued that the use of diffusing slope of each projection of a light control element as provided by Gloor et al is not for the purpose of directing light from a light source to a display. The Examiner respectfully disagrees with the applicant's viewpoint. The Gloor et al reference is used in the rejection for the purpose of showing one skilled in the art the concept of making diffusing layer on just one side or slope of a projection. The whole system of use a control element for directing light from a light source to a display is clearly disclosed in the primary reference, i.e., the prior art described at pages 1-5 and shown in figs. 11-12 of the present application. One skilled in the art will utilize the teaching of Gloor et al, i.e., the making of a

diffusing layer on just one side or slope of a projection, to modify the light control plate of the prior art for the purpose of improving the illumination.

Applicant has argued that the formation of diffusing layer on only one side or slope of each projection as taught by Ishikawa et al is made on the emitting surface of a light control plate while the present device claimed that the diffuse layer is formed on an entrance side of the light control plate. The Examiner respectfully disagrees with the applicant's opinion. Again, the Ishikawa et al reference is used in the rejection for the purpose of showing one skilled in the art the concept of making diffusing layer on just one side or slope of a projection. The whole system of use a control element having an entrance surface with prisms for directing light from a light source to a display is clearly disclosed in the primary reference, i.e., the prior art described at pages 1-5 and shown in figs. 11-12 of the present application. One skilled in the art will utilize the teaching of Ishikawa et al, i.e., the making of a diffusing layer on just one side or slope of a projection, to modify the light control plate having an entrance surface with prisms/projections of the prior art for the purpose of improving the illumination.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exam. Nguyen whose telephone number is (703) 308-4814.The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722 (or 7724).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Nguyen

08/04/99